

## **BOSTON FIRE DEPARTMENT**

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### **CLASSIFICATION FIRE TEST: BFD IX-1**

#### **Scope**

This test method is used to classify curtains, drapes, cubicle curtains, fabric coverings on walls and space dividing panels which are not bonded to the substrate surface, temporary enclosure materials, tents and hanging decorations in accordance with the Boston Fire Prevention Code Articles VII, IX and XXXI. The specimen is suspended vertically and exposed to flaming ignition. The performance criteria for classification as "acceptable for use" is based on the duration of after flame, char length and afterglow.

The classification of fabrics which require treatment with flame retardant chemicals to meet the performance criteria shall contain restrictions on use conditions, such as laundering which would significantly reduce the effectiveness of such treatments.

#### **Procedure**

The test is performed by cutting six specimens, 4 inches wide by 12 inches long. Each specimen is suspended vertically into a propane flame from a one pound cylinder with a 1/2 inch diameter orifice. The flame is at a 45 degree angle from the floor of the test fume hood. The sample is perpendicular to the floor. The test is run with no draft. The lower 1 1/2 inch of specimen is held in the flame (6 inches long with a 1 1/2 inch blue cone) for 10 seconds and removed. The after flame and propagation of after flame from the char caused by ignition are noted; other observances are: melting in flame contact, char only on flame contact and afterglow and propagation of afterglow.

#### **Acceptance Criteria**

After flame shall not exceed two seconds. Flame propagation during ignition and after flame shall not extend beyond six inches from the bottom edge of the specimen. Propagation afterglow shall not exceed forty seconds; non-propagating afterglow in the charred area shall not exceed eighty seconds.

#### **Restrictions**

This test method is used only in conjunction with the Boston Fire Prevention Code to regulate the items specified in the Scope. This test method is used to measure and describe the properties of the materials in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials under actual fire conditions.